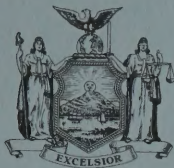
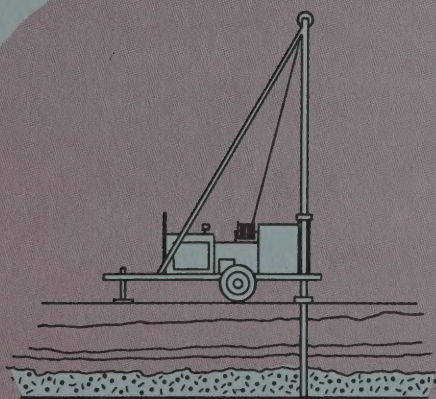
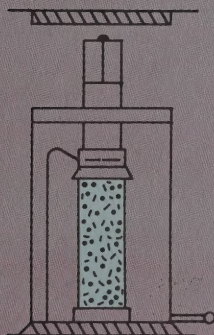


STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

RAYMOND T. SCHULER, COMMISSIONER



SOIL MECHANICS
BUREAU



CONTRACT FASTELD 73-1

TEST WELL REPORT
SOUTHERN TIER EXPRESSWAY
LOWMAN-WAVERLY PT. 1
WESTBOUND REST AREA
CHEMUNG COUNTY

June 1973

MEMORANDUM
DEPARTMENT OF TRANSPORTATION

DATE July 10, 1973

SUBJECT TEST WELL REPORT, SOUTHERN TIER EXPRESSWAY,
LOWMAN-WAVERLY, PT. 1, FASTELD 73-1, CHEMUNG COUNTY

FROM L. H. Moore, Soil Mechanics Bureau, Room 102, Bldg. 7
By: W. P. Moody *W. P. Moody*
TO L. W. Hallenbeck, Regional Director, Region 6

cc J. Sternbach, Construction Subdivision, Room 406, Bldg. 5
M. D. Graham, Facilities Design Subdivision, Room 405, Bldg. 5
Attn: J. J. Ryan

Enclosed is a copy of a test well report prepared by Mr. Vance Bryant, Senior Engineering Geologist, describing work done under the subject contract.

Due to the high yield and low drawdown in the two wells, no specific recommendation regarding pumping rate and pump location was made. The favorable results will allow the State Architect leeway in designing the pump system.

Please contact this Bureau if you have any questions concerning this report.

WPM:FJG:MTC
Encl.

NYSDOT
Library
50 Wolf Road, POD 34
Albany, New York 12232

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
SOIL MECHANICS BUREAU

TEST WELL REPORT
FOR

SOUTHERN TIER EXPRESSWAY
LOWMAN-WAVERLY PT. 1

WESTBOUND REST AREA

By

Vance Bryant
Senior Engineering Geologist

June 1973

ABSTRACT

TABLE OF CONTENTS

Test wells were constructed under Contract FASTELD 73-1 for the Westbound Rest Area on the Southern Tier Expressway in Chemung County. The work was completed in June, 1973.

Drilling and Test Data is included as obtained from records, samples and direct observation.

Included in the Appendices, one per well, are the results of drilling and pump test data as determined by the writer, as well as copies of the driller's logs. Also included are the results of all physical, chemical and bacteriological testing performed by a private laboratory on water samples obtained directly from each well.

DATE June 27, 1973

PROJECT FAIRFELD 73-1

SOUTHERN TIER EXPRESSWAY, LOWMEAD-WAYZEVILLE PT. 1

CHEROKEE COUNTY, P.I.N. 6247.14-301

FROM Vance Bryant, Senior Engineering Geologist

TO W. F. Brady, Associate Soils Engineer

TABLE OF CONTENTS

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LOCATION PLAN.....	3
LIST OF APPENDICES.....	4
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APPENDIX B - TEST WELL NO. 2.....	B1-16

The two wells were completed as screened wells in sand and gravel. To determine the depth of placement for the screens, both wells were drilled below good water bearing material into unconsolidated material. Well No. 1 was drilled first, to a greater depth than well 2, to determine the nature of the subsurface material. Well No. 2 encountered similar strata and was, therefore, terminated at a shallower depth when fine grained material was encountered below good water bearing material. On the basis of the grain size analysis of the aquifer, variable slot screens were fabricated. The 50% size was used to determine the screen slot size due to problems always encountered in obtaining representative samples. The screens were placed at the same depth, 60 to 70 feet below ground, in both wells. Development of the wells proceeded smoothly and was satisfactorily completed within the allotted time period. Pump testing, step drawdown and continuous yield, also went smoothly with one exception. An alarm in the test data for test well No. 1 (Appendix A) a pump malfunction occurred during the step drawdown test. When the test was resumed

MEMORANDUM

DEPARTMENT OF TRANSPORTATION

DATE June 27, 1973

SUBJECT FASTELD 73-1
SOUTHERN TIER EXPRESSWAY, LOWMAN-WAVERLY PT. 1
CHEMUNG COUNTY, P.I.N. 6147.14-301

FROM Vance Bryant, Senior Engineering Geologist

TO W. P. Moody, Associate Soils Engineer

During the months of May and June, 1973, the writer assisted Mr. J. Dieter (EIC) of Region No. 6 in supervising and inspecting the construction of the test wells on the subject project. Drilling was initiated on May 7 and final samples taken for testing on June 8. All phases of the project were completed within the allotted quantities and with no significant difficulty. The desired yield was obtained and surpassed by a large margin, thereby allowing considerable leeway in the choice of pump size and location within each well. The static level (water table) should correlate closely with the seasonal river level elevation. There should be no lack of supply of water to the wells even in periods of severe dry weather.

The two wells were completed as screened wells in sand and gravel. To determine the depth of placement for the screens, both wells were drilled below good water bearing material into unsuitable material. Well No. 1 was drilled first, to a greater depth than well 2, to determine the nature of the subsurface material. Well No. 2 encountered similar strata and was, therefore, terminated at a shallower depth when fine grained material was encountered below good water bearing material. On the basis of the grain size analyses of the aquifer, variable slot screens were fabricated. The 50% size was used to determine the screen slot size due to problems always encountered in obtaining representative samples. The screens were placed at the same depth, 60 to 70 feet below ground, in both wells. Development of the wells proceeded smoothly and was satisfactorily completed within the allotted time period. Pump testing, step drawdown and continuous yield, also went smoothly with one exception. As shown in the test data for test well No.1 (Appendix A) a pump malfunction occurred during the step drawdown test. When the test was resumed

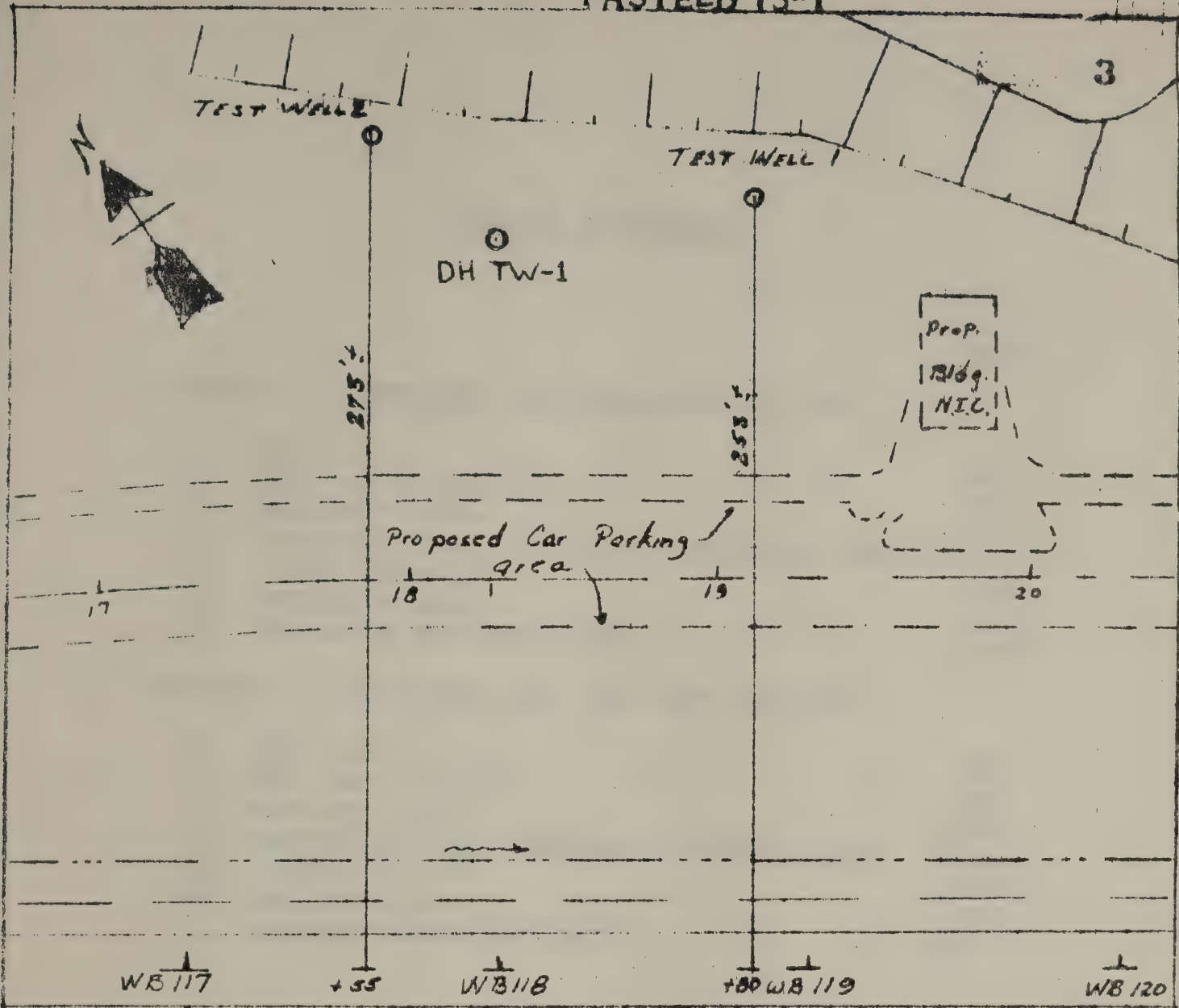
Mr. W. P. Moody
Page 2
June 27, 1973

several days later, a check was made at the rate where the breakdown occurred (25 G.P.M.). No disagreement was noted in the drawdowns on the two days so the test was continued from that point.

Well drilling and pump test data based on the writer's observation and interpretation are included in the appendices which accompany this report. Also included in the appendices are copies of the driller's log for drilling, developing and testing the wells as furnished by the Randolph Well and Pump Company. Some difference will be noted in water levels between the writer's and the driller's report. This is due to different reference points, i.e. the top of casing and original ground respectively. The writer recommends using the O.G. measurements since short sections of casing were added to the total casing length upon completion of testing. This was done to bring the top of casing up to the required one to two feet above ground.

Chemical, physical and bacteriological test results, all of which are satisfactory, are included in the appendix for each respective well. This data has already been furnished to the State Architect for study in designing the water system.

VB:cb
Attachment



NOTES:

1. It is the intent of this contract to obtain two (2) wells each producing 15-20 G.P.M.
2. All well logs & capacity test data shall be forwarded to the Deputy Chief Engineer. (Research)
3. The contractors attention is called to the necessity of obtaining chemical and bacteriological samples for analysis as detailed in the specifications.
4. For item 63a through 63i in this proposal see the "State Architects Standard Specifications of Jan. 2, 1966, item 63-Well Construction" which is in Part III-general engineering specifications for unit Price contracts.

DEPARTMENT OF TRANSPORTATION Region 6 Southern Tier Expressway Lowman-Waverly Chemung County	
Comfort Station Westbound Lane	Scale 1"=50'
Test Wells Plot Plan	6-18-71

LIST OF APPENDICES

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2) WELL LOG & DETAILS	A2
3) PUMP TEST DATA	A3-5
4) BACTERIOLOGICAL, CHEMICAL & PHYSICAL DATA	A6 & 7
5) SIEVE ANALYSIS	A8-11
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APPENDIX B - WESTBOUND REST AREA-TEST WELL NO. 2	
1) WELL DATA	B1
2) WELL LOG & DETAILS	B2
3) PUMP TEST DATA	B3-5
4) BACTERIOLOGICAL, CHEMICAL & PHYSICAL DATA	B6 & 7
5) SIEVE ANALYSIS	B8-11
6) DRILLER'S LOG	B12
7) DRILLER'S PUMP TEST DATA	B13-16

APPENDIX A

WESTBOUND REST AREA-TEST WELL NO. 1

SOUTHERN TIER EXPRESSWAY, LOWMAN-WAVERLY PT. 1
WESTBOUND REST AREA-TEST WELL NO. 1

LOCATION

Centerline Station: WB 118+80
Offset: 253 Feet Left
Original Ground Elevation (O.G.): 832.6(+)

DRILLING DATA

Contractor: Randolph Well & Pump Company
Driller: Fran Haynes
Date Started: 5/7/73
Date Completed: 5/10/73

WELL DATA

Source of Water: Granular Material
Overburden: Sand & Gravel
Static Level During Drilling (Water Table): 42 To 43 Feet
Depth of Well: 81.5 Feet

TEST DATA

Date Started: 6/7/73
Date Completed: 6/8/73
Location of Pump Intake: 58(+) Feet
Static Level During Testing (Water Table): 42(-) Feet
Yield: 65 Gallons Per Minute
Drawdown: 7 Inches
Specific Capacity: 110(+) G.P.M. Per Foot of Drawdown

PUMP DATA

Make & Type: Goulds 3HP Submersible-Model UTM30412

SOUTHERN TIER EXPRESSWAY, LOWMAN-WAVERLY PT. 1
WESTBOUND REST AREA-TEST WELL NO. 1

WELL LOG

WELL DETAILS

	Top of Casing
	Elevation-834.6
	Original Ground Surface (O.G.)
Regraded Natural Material (Sand & Gravel)	Elevation-832.6
	Drawdown, Pumping Rate-65 G.P.M.
	Depth 7 Inches-Elevation 832.0
Sand & Gravel	
Thin Silt & Clay Layer-30(+) Feet	
Sand & Gravel	Static Level During Testing
0 To 58 Feet	Depth 42(-) Feet Elevation 790.6
Fine & Coarse Sand 58 To 64 Feet	Pump Intake During Testing
	Depth 58(+) Feet-Elevation 774.6
	Bottom of Casing-Top of Screen
	Depth 60 Feet-Elevation 772.6
Sand & Gravel 64 To 71 Feet	Bottom of 10 Foot Well Screen
	Depth 70 Feet-Elevation 762.6
Silt, Sand & Gravel 71 to 76 Feet	Backfill (70-81.5 Feet)
	Bank Run Sand & Gravel
Glacial Till 76 to 81.5 Feet	Bottom of Drilled Well
	Depth 81.5 Feet-Elevation 751.1

SOUTHERN TIER EXPRESSWAY, LOWMAN-WAVERLY PT. 1
WESTBOUND REST AREA-TEST WELL NO. 1

STEP DRAWDOWN TEST

Static Level During Test - 41 Feet 10 Inches Below Original Ground
Pump Intake During Test - 58(+) Feet Below Original Ground

<u>Date</u>	<u>Time</u>	<u>Rate (GPM)</u>	<u>Dynamic Level (Feet)</u>	<u>Drawdown (Inches)</u>	<u>Comments</u>
6/7/73	8:15 AM	10	-	0	Water Cloudy
	8:30 AM	10	41'10½"	½"	Water Clear
	8:45 AM	10	41'10½"	½"	
	9:00 AM	10	41'10½"	½"	
	9:15 AM	20	-	-	Increased
					Pumping Rate
	9:30 AM	20	41'11½"	1½"	Water Remained
					Clear
	9:45 AM	20	41'11½"	1½"	
	10:00 AM	20	41'11½"	1½"	
	10:15 AM	30	-	-	Increased
					Pumping Rate
	10:30 AM	30	42'½"	2½"	Water Remained
					Clear
	10:45 AM	30	42'½"	2½"	
	11:00 AM	30	42'½"	2½"	
	11:15 AM	40	-	-	Increased
					Pumping Rate
	11:30 AM	40	42'1½"	3½"	Water Remained
					Clear
	11:45 AM	40	42'1½"	3½"	
	12:00 Noon	40	42'1½"	3½"	
	12:15 PM	50	-	-	Increased
					Pumping Rate
	12:30 PM	50	42'3½"	5½"	Water Remained
					Clear
	12:45 PM	50	42'3"	5"	
	1:00 PM	50	42'3"	5"	
	1:15 PM	65	-	-	Increased
					Pumping Rate
	1:30 PM	65	42'5"	7"	(Maximum Pump
					Capacity)
	1:45 PM	65	42'5"	7"	Water Remained
					Clear

<u>Date</u>	<u>Time</u>	<u>Rate (GPM)</u>	<u>Dynamic Level (Feet)</u>	<u>Drawdown (Inches)</u>	<u>Comments</u>
6/7/73	2:00 PM	65	42' 5"	7"	Water Remained Clear
	2:15 PM	65	42' 5"	7"	Water Remained Clear
	2:30 PM	65	42' 5"	7"	Water Remained Clear
	2:45 PM	65	42' 5"	7"	Water Remained Clear
	3:00 PM	65	42' 5"	7"	Water Remained Clear
	3:15 PM	65	42' 5"	7"	Water Remained Clear
	3:30 PM	65	42' 5"	7"	Water Remained Clear
	3:45 PM	65	42' 5"	7"	Water Remained Clear
	4:00 PM	65	42' 5"	7"	Water Remained Clear
	4:15 PM	65	42' 5"	7"	End Test

Well disinfected and water recirculated until 5:15 PM.

Additional chlorine (HTH) added and allowed to stand overnight.

SOUTHERN TIER EXPRESSWAY, LOWMAN-WAVERLY PT. 1
WESTBOUND REST AREA-TEST WELL NO. 1

CONTINUOUS YIELD TEST

Static Level During Test - 41 Feet 11 Inches Below Original Ground
Pump Intake During Test - 58(+) Feet Below Original Ground

<u>Date</u>	<u>Time</u>	<u>Rate (GPM)</u>	<u>Dynamic Level (Feet)</u>	<u>Drawdown (Inches)</u>	<u>Comments</u>
6/8/73	7:00 AM	65	-	0	Water Rusty
	7:30 AM	65	42'6"	7"	Water Clear
	8:00 AM	65	42'6"	7"	
	8:30 AM	65	42'6"	7"	
	9:00 AM	65	42'6"	7"	
	9:30 AM	65	42'6"	7"	
	10:00 AM	65	42'6"	7"	
	10:30 AM	65	42'6"	7"	
	11:00 AM	65	42'6"	7"	
	11:30 AM	65	42'6"	7"	
	12:00 Noon	65	42'6"	7"	
	12:30 PM	65	42'6"	7"	
	1:00 PM	65	42'6"	7"	
	1:30 PM	65	42'6"	7"	
	2:00 PM	65	42'6"	7"	
	2:30 PM	65	42'6"	7"	
	3:00 PM	65	42'6"	7"	
	3:30 PM	65	42'6"	7"	
	4:00 PM	65	42'6"	7"	
	4:30 PM	65	42'6"	7"	
	5:00 PM	65	42'6"	7"	
	5:30 PM	65	42'6"	7"	
	6:00 PM	65	42'6"	7"	
	6:30 PM	65	42'6"	7"	
	7:00 PM	65	42'6"	7"	
	7:30 PM	65	42'6"	7"	
	8:00 PM	65	42'6"	7"	
	8:30 PM	65	42'6"	7"	
	9:00 PM	65	42'6"	7"	
	9:30 PM	65	42'6"	7"	
	10:00 PM	65	42'6"	7"	
	10:30 PM	65	42'6"	7"	End Pumping
	10:31 PM	65	41'11½"	-	Recovery
	10:32 PM	65	41'11"	-	Recovery
	11:00 PM	65	41'11"	-	End Test

Costello's Laboratory, Inc.
Charles V. Costello
Consulting Chemist

30 Ailendale Road
Binghamton, N. Y. 13903
Phone: (607) 722-0030

RESULTS OF EXAMINATION OF WATER

LAB NO. 963/79

COLLECTED BY Ray Randolph

DATE COLLECTED 6/8/73

DATE REPORTED 6/12/73

NAME OF SUPPLY Well # 1

OWNER'S NAME W5001

ADDRESS

SAMPLING POINT Pasteld 73-1

BACTERIA PER ML 200

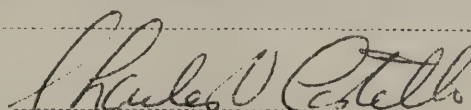
(AGAR PLATE COUNT AT 35°)

COLIFORM GROUP Negative

MPN NO/100 ML less than 2.3-OK

THE RESULTS INDICATE THAT THE WATER WAS
OF A SATISFACTORY SANITARY QUALITY WHEN THE SAMPLE WAS
COLLECTED.

REMARKS:


Charles V. Costello

30 ALLENDALE ROAD
BINGHAMTON, N. Y. 13903
722 - 0030

COSTELLO'S LABORATORY INC.

SUCCESSOR TO NELSON & LAUDER
CHARLES V. COSTELLO
CONSULTING SANITARY CHEMIST

LABORATORY FOR
SANITARY & ANALYTICAL
CHEMISTRY

RESULTS OF EXAMINATION OF WATER

LABORATORY NO. C 60/73 COLLECTED BY Ray Randolph
DATE COLLECTED 6/9/73 RECEIVED 6/9/73 REPORTED 6/12/73
PLACE Eastold 73-1 COUNTY Chemung
(CITY, TOWN, VILLAGE OR HAMLET)
SAMPLING POINT Well # 1
OWNER LYSDOT TENANT _____

BACTERIAL EXAMINATION

TEST FOR COLIFORM GROUP

BACTERIA PER ML. AGAR. 35°C - 24 HRS. _____ M. P. N. * / 100 ML _____

THIS WATER WAS _____ OF A SATISFACTORY SANITARY QUALITY WHEN THE SAMPLE WAS COLLECTED

PHYSICAL EXAMINATION

COLOR 2 TURBIDITY 2 ODOR + COLD Veg. + HOT _____

CHEMICAL EXAMINATION

RESULTS IN PARTS PER MILLION

IRON (Fe) <u>.05</u>	AMMONIA FREE (AS N) _____	OXYGEN CONSUMED (O) _____
MANGANESE (Mn) <u>Neg.</u> <u>as Rec'd</u>	ALB. AMMONIA (AS N) _____	CHLORIDES (Cl) <u>27.0</u>
CARBON DIOXIDE (CO ₂) <u>4.0</u>	NITRITES (AS N) _____	TOTAL HARDNESS (AS CaCO ₃) <u>168</u>
SULFIDES (F) _____	NITRATES (AS N) <u>.95</u>	ALKALINITY (AS CaCO ₃) <u>123</u>
TOTAL SOLIDS <u>270</u>	LOSS OF IGNITION _____	CALCIUM (AS CaCO ₃) <u>143</u>
CARBONATES <u>201</u>	SULFATES <u>30</u>	MAGNESIUM (AS CaCO ₃) <u>25</u>
SILICA _____	COPPER _____	ELECTROMETRIC PH VALUE <u>7.2</u>
TOTAL PHOSPHATES _____	ORTHO PHOSPHATES _____	META PHOSPHATES _____
SUSPENDED MATTER _____	TEMP AIR ° F _____	TEMP WATER ° F _____
DETERGENTS _____		

REMARKS:

MOST PROBABLE NUMBER

1=VERY SLIGHT, 2=SLIGHT, 3=DISTINCT, 4=DECIDED, 5=EXTREME

A-7


CHARLES V. COSTELLO

INDEX OF SAND ANALYSIS

Randolph Well & Pump Co.

5/17/73

Well No. 1 for State of N.Y.

SAND ANALYSIS

UOP JOHNSON DIVISION

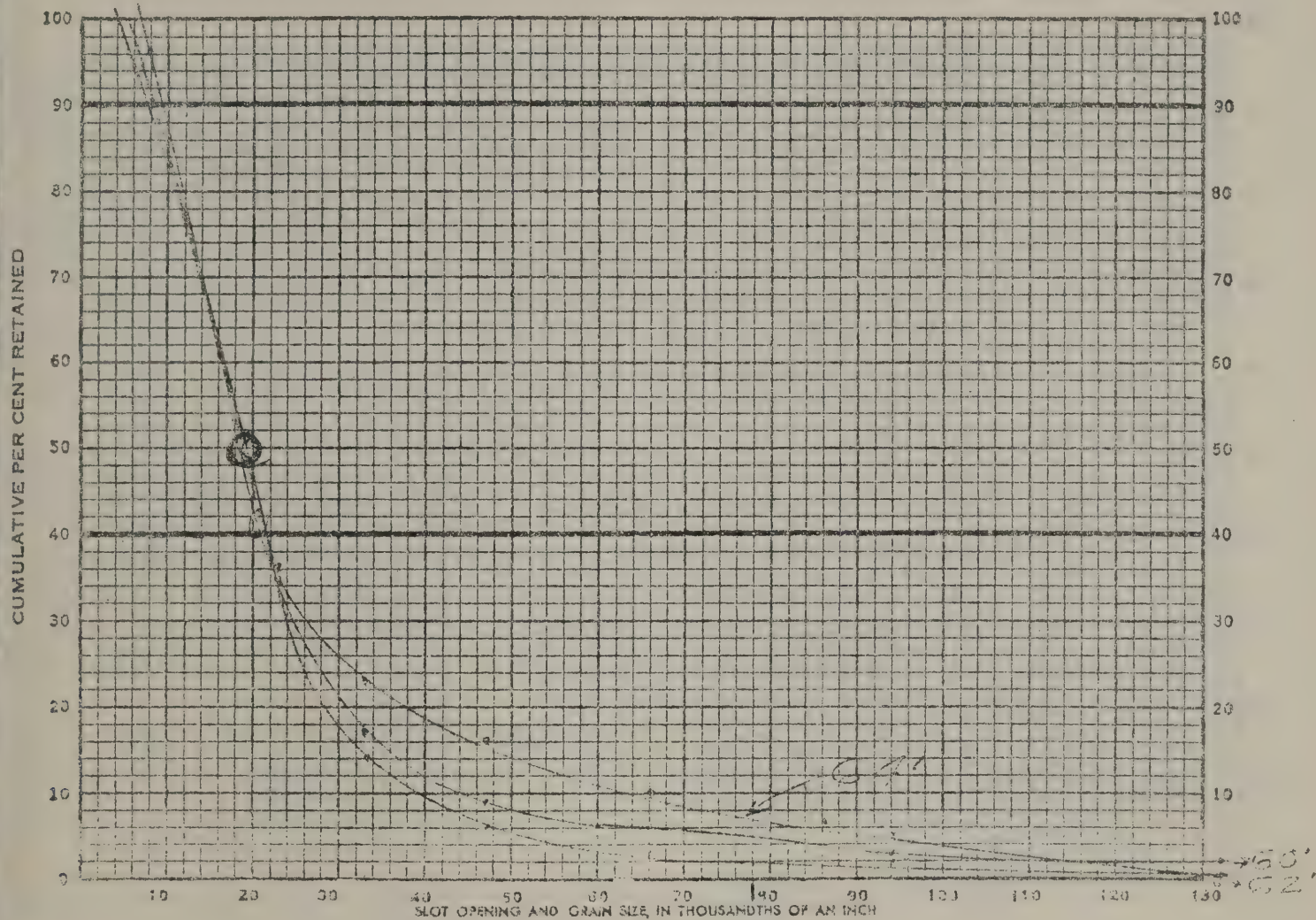
315 North Pierce Street
Saint Paul, Minn. 55104

Sample sent in by Randolph Well & Pump Co., Inc.

Town Cortland State N.Y. Date 5/17/73

From well of Well No. 1 for State of New York at Lowman Route 17

Remarks Contract No. Fasteld 73-1 57702 (Rest Area)



54

	SIEVE OPENINGS	CUMULATIVE PER CENT RETAINED		
		60'	62'	64'
6	.132	2	1	1
8	.094	3	2	2
12	.063	6	5	5
16	.047	9	8	10
20	.033	17	14	23
30	.023	36	33	36
40	.018	62	51	51
50	.012			
70	.008	86	87	86
100	.005	98	98	97
	SCREEN SLOT			

Notes:

Recommended Slot Opening:

Recommended Screen: Dia. _____ in. Length _____ Ft.

By:

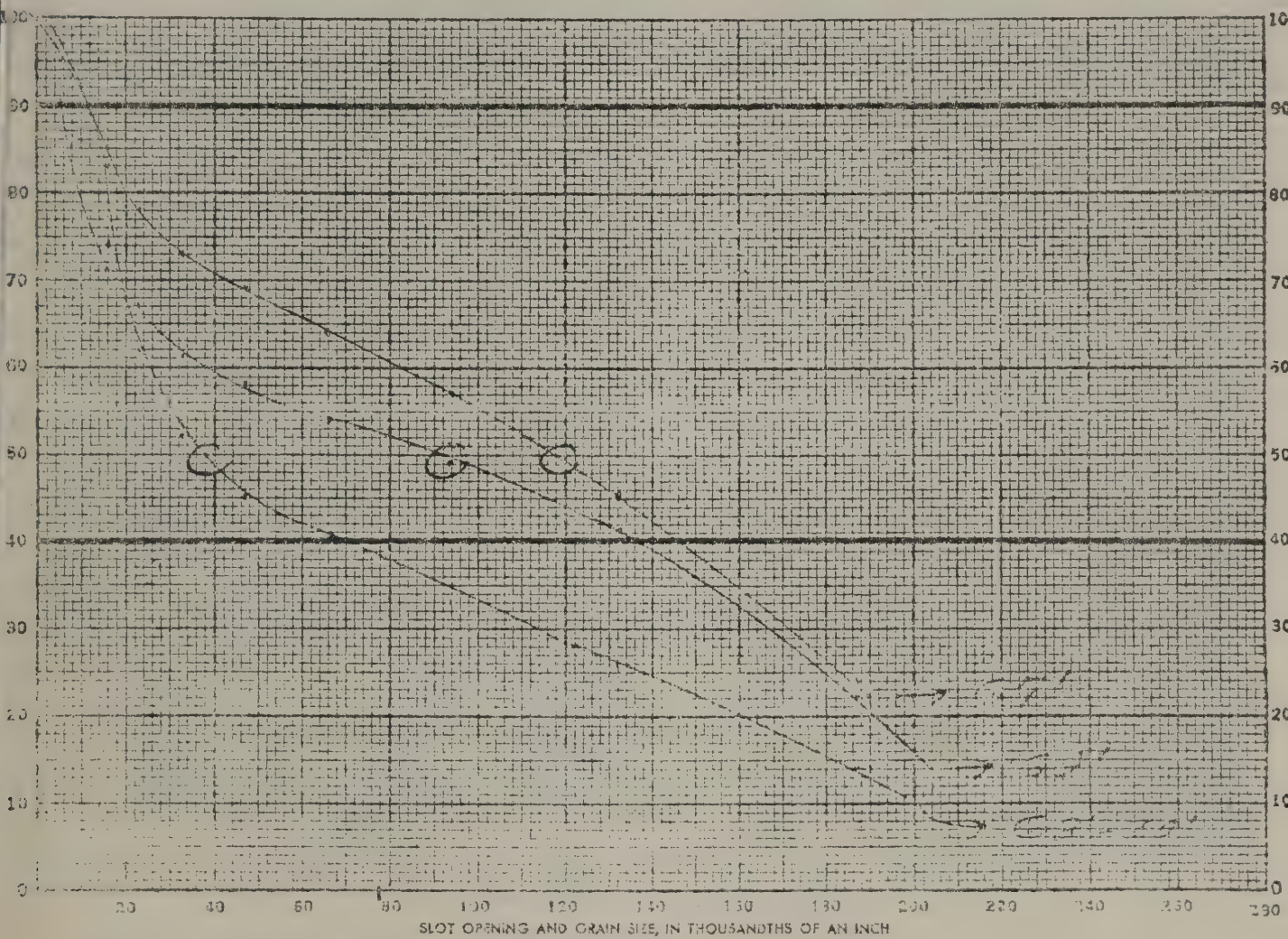
SO MANY CONSIDERATIONS ENTER INTO THE MAKING OF A GOOD WELL THAT, WHILE WE BELIEVE SLOT SIZES FURNISHED OR RECOMMENDED FROM SAND SAMPLES ARE CORRECT WE ASSUME NO RESPONSIBILITY FOR THE SUCCESSFUL OPERATION OF JOHNSON WELL SCREENS

SAND ANALYSIS

UOP JOHNSON DIVISION

315 North Pierce Street
Saint Paul, Minn. 55104

Sample sent in by Randolph Well & Pump Co., Inc.
 Town Cortland State N.Y. Date 5/17/73
 From well of Well No. 1 for State of New York at Lowman Route 17
 Remarks Contract No. Fasteld 73-1 57702 (Rest Area)



SIEVE OPENINGS	CUMULATIVE PER CENT RETAINED		
	67'	69'	69-70'
.250			
.187			
.150	45	40	35
.094	57	40	35
.068	64	54	40
.047	67	58	43
.033	70	60	45
.023	75	65	50
.015	80	70	55
.010	85	75	60
.0075	90	80	65
SCREEN	95	90	70
SLOT	95	90	97

Notes: _____

 Recommended Slot Opening: _____
 Recommended Screen: Dia. _____ in. Length _____ Ft.
 By: _____

SO MANY CONSIDERATIONS ENTER INTO THE MAKING OF A GOOD WELL THAT, WHILE WE BELIEVE SLOT SIZES FURNISHED OR RECOMMENDED FROM SAND SAMPLES ARE CORRECT WE ASSUME NO RESPONSIBILITY FOR THE SUCCESSFUL OPERATION OF JOHNSON WELL SCREENS

SAND ANALYSIS

UOP JOHNSON DIVISION

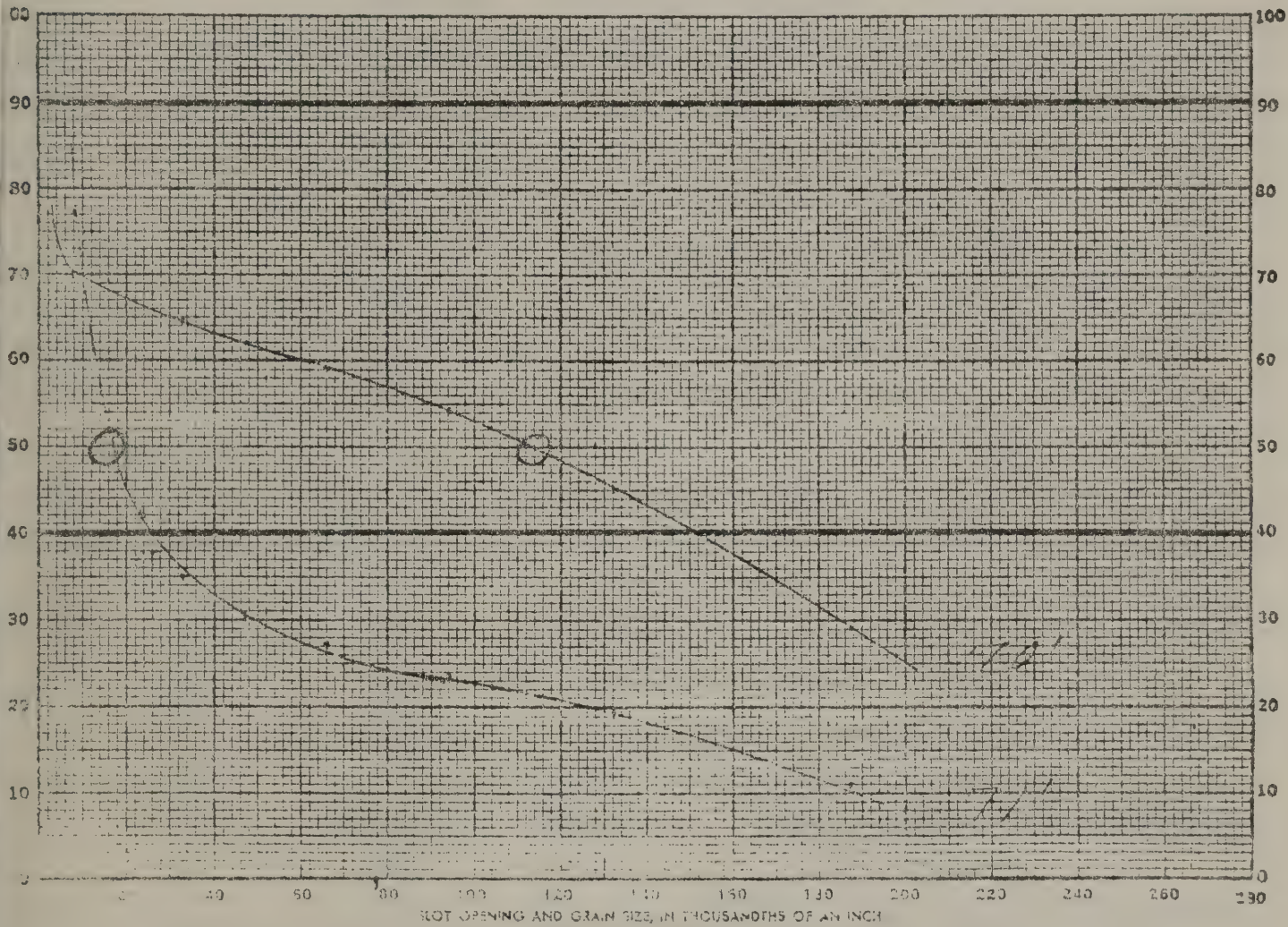
315 North Pierce Street
Saint Paul, Minn. 55104

Sample sent in by Randolph Well & Pump Co., Inc.

Town Cortland State N.Y. Date 5/17/73

From well of Well No. 1 for State of New York at Lawman Route 17

Remarks Contract No. Fasteld 73-1 57702 (Rest Area)



SIEVE OPENINGS	CUMULATIVE PER CENT RETAINED	
250	70	70
137	9	11
100	5	5
75	5	5
60	5	5
47	5	5
33	5	5
23	5	5
16	5	5
10	5	5
SCREEN	006-70	86

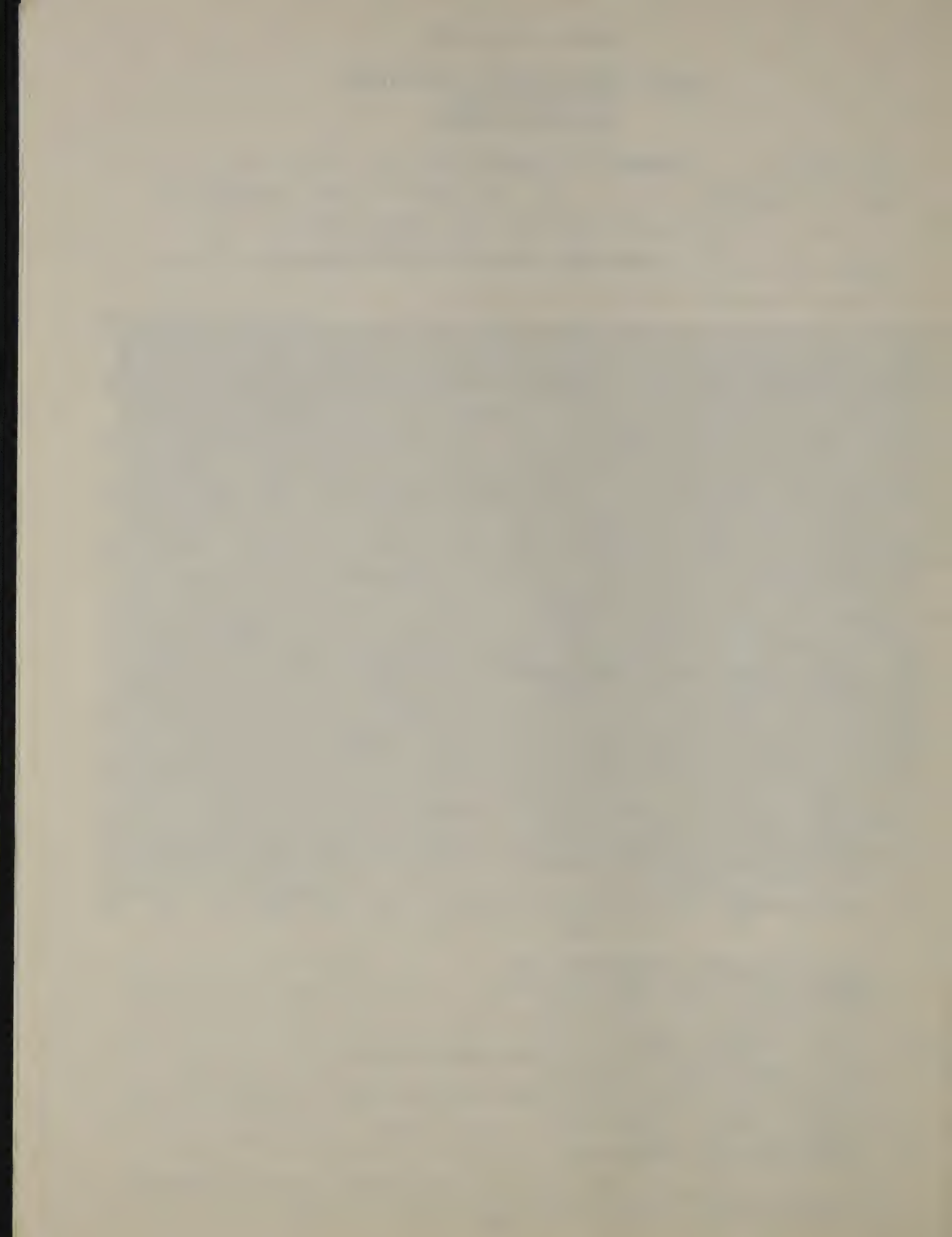
Notes: _____

Recommended Slot Opening: _____

Recommended Screen: Dia. _____ in. Length _____ Ft.

By: _____

SO MANY CONSIDERATIONS ENTER INTO THE MAKING OF A GOOD WELL THAT, WHILE WE BELIEVE SLOT SIZES FURNISHED OR RECOMMENDED FROM SAND SAMPLES ARE CORRECT WE ASSUME NO RESPONSIBILITY FOR THE SUCCESSFUL OPERATION OF JOHNSON WELL SCREENS



Owner's Name DEPT OF TRANSPORTATION

Address LOWMAN, N. Y. - Rte 17

No. FA 1073-1 Size of Well 6"

Mach. No. 10

Driller HAYN

SAND CPM. Sec Test Sheet D. Down

Total Depth in Feet

Start MAY 7-1973

Date Completed

DEPTH

ROCK
DRILLEDGASOLINE
IN GALS.

FORMATION AND REMARKS

0-5 ft - Dry Gravel
 5-10 - Dry Gravel
 10-15 - Dry Gravel
 15-20 - Dry Gravel
 20-25 - Dry Gravel
 25-30 - Dry Gravel
 30-35 - Gravel, sand & clay
 35-40 - Dry gravel & little clay
 40-45 - Fine sand & gravel, first water
 48 - Fine sand & gravel, some water
 49 - Fine sand & gravel, 6 gpm.
 51 - Very good gravel, 8 gpm, S.L. - 47'
 53 - Some gravel - S.L. 43'
 56 - good gravel - 10 gpm - S.L. - 42'
 58 - good gravel - 10 gpm - S.L. - 43'
 60 - good fine sand & gravel - S.L. 43'
 62 - fine sand, heaves in pipe
 64 - nice fine gravel & sand, heaves in pipe
 67' - still heaves in pipe
 69'6" - Shut water off - pulled back to get sample
 70' - fine sand, fine & coarse gravel
 71' - fine sand, large gravel - bailed 30 CPM.
 73' - sand & gravel - fine to very coarse
 74' - Very fine sand & silt, some large stones
 75' - Very fine sand & silt, some large stones
 76' - Very fine sand & silt, some large stones
 78-79 - sand & gravel & clay
 79-80 - Hard pan some gravel
 80-81 1/2 - Hard pan water 7 1/2 CPM.

REMARKS:

Filled bottom w/ back run gravel & pulled casing back to 70'

Contract # *Wells 73-1* R. D. 4, CORTLAND, N. Y.

Sheet 1 of 2

Measurement taken 4" above G.L.

RECORD OF TEST

Well No. *1*

Date *6-7-73*

For *Dept of Transportation - State of New York*

Well Located At *Laurieham, N.Y.*

TIME	PUMPING LEVEL FEET	METER READING	STATIC LEVEL	G. P. M.
8:00			42' 6"	
8:15	42' 6 1/2"			10
8:30	42' 6 1/2"			10
8:45	42' 6 1/2"			10
9:00	42' 6 1/2"			10
9:15	42' 6 3/4"	<i>increased</i>		20
9:30	42' 7 1/2"			20
9:45	42' 7 1/2"			20
10:00	42' 7 1/2"			20
10:15	42' 7 1/2"	<i>increased</i>		30
10:30	42' 8 1/2"			30
10:45	42' 8 1/2"			30
11:00	42' 8 1/2"			30
11:15	42' 8 1/2"	<i>increased</i>		40
11:30	42' 9 1/2"			40
11:45	42' 9 1/2"			40
12:00	42' 9 1/2"			40
12:15	42' 9 1/2"			50

Make & size of engine or motor used: *3-H.P. Goulds Submersible #UTM30412*

Remarks: *Electric Probe used to measure pumping levels*

Temperature 52°

DESCRIPTION OF PUMP USED

SIZE OF PULLEY

3 SUB - UTM30412

INCH ORIFICE ON

10

WIDTH OF WEIR

DEPTH AIR LINE

AIR PRES. WHEN NOT PUMPING

STATIC LEVEL *42' 6"*

Height of

gauge above
base

DISCHARGE

FEET OF STATIC

SECTION FT.

INCH PIPE

WITNESS FOR PURCHASER

A-13

Ray Randolph

FOR: RANDOLPH WELL & PUMP CO.

Contract # *Hastold 73-1* R. D. 4, CORTLAND, N. Y.

Pipe 4" above G.L.

Sheet 2 of 2

Well No. *1* RECORD OF TEST

Date *6-7-73*

For *Dept of Transportation - State of New York*

Well Located At *Lewman, N.Y.*

TIME	PUMPING LEVEL FEET	METER READING	STATIC LEVEL	G. P. M.		
<i>12:30</i>	<i>42' 11 1/2"</i>		<i>42' 6"</i>	<i>50</i>		
<i>1:45</i>	<i>42' 11"</i>			<i>50</i>		
<i>1:00</i>	<i>42' 11"</i>			<i>50</i>		
<i>1:15</i>	<i>42' 11"</i>	<i>increased</i>		<i>65</i>		
<i>1:30</i>	<i>43' 1"</i>			<i>65</i>		
<i>1:45</i>	<i>43' 1"</i>			<i>65</i>		
<i>2:00</i>	<i>43' 1"</i>			<i>65</i>		
<i>2:15</i>	<i>43' 1"</i>			<i>65</i>		
<i>2:30</i>	<i>43' 1"</i>			<i>65</i>		
<i>3:00</i>	<i>43' 1"</i>			<i>65</i>		
<i>3:15</i>	<i>43' 1"</i>			<i>65</i>		
<i>3:30</i>	<i>43' 1"</i>			<i>65</i>		
<i>3:45</i>	<i>43' 1"</i>			<i>65</i>		
<i>4:15</i>	<i>43' 1"</i>			<i>65</i>		
<i>Chlorinate Well and re-cycled for 1 hr</i>						

Make & size of engine or motor used: *3-N.P. Goulds Submersible #UTM 30412*
 Remarks:

DESCRIPTION OF PUMP USED

Goulds Sub
 DISCHARGE *10"*
 DEPTH OF SETTING *3"*
 SECTION *2"* FT. INCH PIPE

SIZE OF PULLEY

INCH CRIFICE ON
 WIDTH OF WEIR
 DEPTH AIR LINE
 AIR PRES. WHEN NOT PUMPING
 STATIC LEVEL
 Height of
 gauge above
 base

WITNESS FOR PURCHASER

A-14

Ray Randolph
 FOR: RANDOLPH WELL & PUMP CO.

R. D. 4, CORTLAND, N. Y.

Sheet 1 of 2

16-hr pump test

RECORD OF TEST

Well No. 1

For Dept of Transportation - State of New York

Date 6-7-73

Well Located At Lamman N.Y.

TIME	PUMPING LEVEL FEET	METER READING	STATIC LEVEL	G. P. M.		
7:00			42' 7"			
7:15	43' 1"			65		
7:30	43' 1"			65		
7:45	43' 1"			65		
8:00	43' 1"			65		
9:00	43' 1"			65		
10:00	43' 1"			65		
11:00	43' 1"			65		
12:00	43' 1"			65		
1:00	43' 1"			65		
2:00	43' 1"			65		
3:00	43' 1"			65		
4:00	43' 1"			65		
5:00	43' 1"			65		
6:00	43' 1"			65		
7:00	43' 1"			65		

Make & size of engine or motor used: 3-H.P. Goulds Submersible # 4TM30412

Remarks: Water temperature 50°

DESCRIPTION OF PUMP USED	SIZE OF PULLEY
TYPE <u>Goulds Sub</u>	INCH ORIFICE ON
AGES <u>16</u>	WIDTH OF WEIR
SIZE <u>6"</u>	DEPTH AIR LINE
TOP NO. <u>3</u>	AIR PRES. WHEN NOT PUMPING
DISCHARGE <u>2"</u>	STATIC LEVEL
DEPTH OF SETTING <u>59'</u>	Height of
LOCATION <u>2" FT.</u>	gauge above
	base

Contract # has filed "73-1

RECORD OF TEST

Well No. 1

Date 6-8-73

For Dept of Transportation - State of New York

Well Located At Forman

TIME	PUMPING LEVEL FEET	METER READING	STATIC LEVEL	G. P. M.
			42' 7"	
7:00	43' 1"			65
8:00	43' 1"			65
9:00	43' 1"			65
10:30	43' 1"			65
		<u>Recovery</u>		
10:30	43' 1"			
10:31	42' 7 1/2"			
10:32	42' 7 1/2"			
10:33	42' 7 1/2"			
10:34	42' 7 1/2"			
10:35	42' 7 1/2"			
10:40	42' 7 1/2"			
10:45	42' 7 1/2"			
10:50	42' 7 1/2"			
10:55	42' 7 1/2"			
11:00	42' 7 1/2"			

Make & size of engine or motor used: 3 H.P. Goulds Submersible Pump #4TM30412

Remarks:

DESCRIPTION OF PUMP USED	SIZE OF PULLEY
<u>Submersible</u>	<u>INCH ORIFICE ON</u>
<u>10"</u>	<u>WIDTH OF WEIR</u>
<u>6"</u>	<u>DEPTH AIR LINE</u>
<u>3"</u>	<u>AIR PRES. WHEN NOT PUMPING</u>
<u>2"</u>	<u>STATIC LEVEL</u>
<u>59"</u>	<u>Height of</u>
<u>FT.</u>	<u>gauge above</u>
<u>INCH PIPE</u>	<u>base</u>

APPENDIX B

WESTBOUND REST AREA-TEST WELL NO. 2

SOUTHERN TIER EXPRESSWAY, LOWMAN-WAVERLY PT. 1
WESTBOUND REST AREA-TEST WELL NO. 2

LOCATION

Centerline Station: WB 117+55
Offset: 273 Feet Left
Original Ground Elevation (O.G.): 832.6(+)

DRILLING DATA

Contractor: Randolph Well & Pump Co.
Driller: Fran Haynes
Date Starter: 5/10/73
Date Completed: 5/16/73

WELL DATA

Source of Water: Granular Material
Overburden: Sand & Gravel
Static Level During Drilling (Water Table): 41 to 42 Feet
Depth of Well: 73 Feet

TEST DATA

Date Started: 6/1/73
Date Completed: 6/6/73
Location of Pump Intake: 58(+) Feet
Static Level During Testing (Water Table): 42(-) Feet
Yield: 65 Gallons Per Minute
Drawdown: 4 Feet 4 Inches
Specific Capacity: 15(+) G.P.M. Per Foot of Drawdown

PUMP DATA

Make & Type: Goulds 3 HP Submersible-Model UTM 30412

SOUTHERN TIER EXPRESSWAY, LOWMAN-WAVERLY PT. 1
WESTBOUND REST AREA-TEST WELL NO. 2

WELL LOG

WELL DETAILS

	Top of Casing
	Elevation - 835.0
	Original Ground Surface (O.G.)
Regraded Natural Material (Sand & Gravel)	Elevation 832.6
	Drawdown, Pumping Rate-65 G.P.M.
	Depth 4 Feet 4 Inches-Elev. 828.3(+)
Sand & Gravel	
0 To 30 Feet	
Clay, Silt Sand & Gravel	Static Level During Testing
30 To 54 Feet	Depth 42(-) Feet-Elevation 790.6
	Pump Intake During Testing
	Depth 58(+) Feet-Elevation 773.6
Sand & Gravel	Bottom of Casing-Top of Screen
54 To 70 Feet	Depth 60 Feet-Elevation 772.6
Silt, Sand & Gravel	Bottom of 10 Foot Well Screen
70 To 73 Feet	Depth 70 Feet-Elevation 762.6
	*Bottom of Drilled Well
	Depth 73 Feet-Elevation 759.6

*Well backfilled from 73 to 70 feet with bank run sand & gravel

SOUTHERN TIER EXPRESSWAY, LOWMAN-WAVERLY PT. 1
WESTBOUND REST AREA-TEST WELL NO. 2

STEP DRAWDOWN TEST

Static Level During Test - 41 Feet 10 Inches Below Original Ground
Pump Intake During Test - 58(+) Feet Below Original Ground

<u>Date</u>	<u>Time</u>	<u>Rate (GPM)</u>	<u>Dynamic Level (Feet)</u>	<u>Drawdown (Feet)</u>	<u>Comments</u>
6/1/73	8:30 AM	10	-	0	Water Cloudy
	8:45 AM	10	42'6"	8"	Water Clear
	9:00 AM	10	42'6"	8"	
	9:15 AM	10	42'6"	8"	
	9:30 AM	15	-	-	Increased
					Pumping Rate
	9:45 AM	15	42'8"	10"	Water Remained
					Clear
	10:00 AM	15	42'8"	10"	
	10:15 AM	15	42'8"	10"	
	10:30 AM	20	-	-	Increased
					Pumping Rate
	10:45 AM	20	42'8"	1'2"	Water Remained
					Clear
	11:00 AM	20	43'0"	1'2"	
	11:15 AM	20	43'0"	1'2"	
	11:30 AM	25	-	-	Increased
					Pumping Rate
	11:45 AM	25	43'3"	1'5"	Water Remained
					Clear
6/5/73	12:00 Noon	25	43'3"	1'5"	
	12:15 PM	25	43'3"	1'5"	
	12:30 PM	Attempted to increase pumping rate-unsuccessfully, Pump malfunction stopped test for repairs. New pump in service 6/5/73.			
	1:00 PM	25	New static level 41'11"		Continue Test
			below O.G.		
	1:15 PM	25	43'5"	1'6"	Water Clear
	1:30 PM	25	43'5"	1'6"	
	1:45 PM	25	43'5"	1'6"	
	2:00 PM	37.5	-	-	Increased
					Pumping Rate
6/5/73	2:15 PM	37.5	44'2"	2'3"	Water Remained
					Clear

<u>Date</u>	<u>Time</u>	<u>Rate (GPM)</u>	<u>Dynamic Level (Feet)</u>	<u>Drawdown (Feet)</u>	<u>Comments</u>
6/5/73	2:30 PM	37.5	44' 2"	2' 3"	
	2:45 PM	37.5	44' 2"	2' 3"	
	3:00 PM	48.5	-	-	Increased
					Pumping Rate
	3:15 PM	48.5	45' 2½"	3' 3½"	Water Remained
					Clear
	3:30 PM	48.5	45' 2½"	3' 3½"	
	3:45 PM	48.5	45' 2½"	3' 3½"	
	4:00 PM	65	-	-	Increased
					Pumping Rate
	4:15 PM	65	46' 2¼"	4' 3¼"	(Maximum Pump
					Capacity)
	4:30 PM	65	46' 3½"	4' 4½"	Water Remained
					Clear
	4:45 PM	65	46' 3½"	4' 4½"	
	5:00 PM	65	46' 3½"	4' 4½"	End Test

SOUTHERN TIER EXPRESSWAY, LOWMAN-WAVERLY PT. 1
WESTBOUND REST AREA-TEST WELL NO. 2

CONTINUOUS YIELD TEST

Static Level During Test - 42.0 Feet Below Original Ground

Pump Intake During Test - 58(+) Feet Below Original Ground

<u>Date</u>	<u>Time</u>	<u>Rate (GPM)</u>	<u>Dynamic Level (Feet)</u>	<u>Drawdown (Feet)</u>	<u>Comments</u>
6/6/73	7:00 AM	65	-	0	Water Rusty
	7:15 AM	65	46' 4"	4' 4"	Water Clear
	7:30 AM	65	46' 4"	4' 4"	
	7:45 AM	65	46' 4"	4' 4"	
	8:00 AM	65	46' 4"	4' 4"	
	9:00 AM	65	46' 4"	4' 4"	
	10:00 AM	65	46' 4"	4' 4"	
	11:00 AM	65	46' 3½"	4' 3½"	
	12:00 Noon	65	46' 3½"	4' 3½"	
	1:00 PM	65	46' 4"	4' 4"	
	2:00 PM	65	46' 4"	4' 4"	
	3:00 PM	65	46' 4"	4' 4"	
	4:00 PM	65	46' 4"	4' 4"	
	5:00 PM	65	46' 4"	4' 4"	
	6:00 PM	65	46' 4"	4' 4"	
	7:00 PM	65	46' 4"	4' 4"	
	8:00 PM	65	46' 4"	4' 4"	
	9:00 PM	65	46' 4"	4' 4"	
	10:00 PM	65	46' 4"	4' 4"	
	10:30 PM	65	46' 4"	4' 4"	End Pumping
	10:31 PM	-	42' 2"	-	Recovery
	10:34 PM	-	42' 1 3/4"	-	Recovery
	10:45 PM	-	42' 1½"	-	Recovery
	10:55 PM	-	42' 1¼"	-	Recovery
	11:00 PM	-	42' 1¼"	-	End Test

Costello's Laboratory, Inc.
Charles V. Costello
Consulting Chemist

30 Allendale Road
Binghamton, N. Y. 13903
Phone: (607) 722-0030

RESULTS OF EXAMINATION OF WATER

LAB NO.262/73.....

COLLECTED BYRay Randolph.....

DATE COLLECTED6/6/73.....

DATE REPORTED6/12/73.....

NAME OF SUPPLYRest Area Well # 2.....

OWNER'S NAMEN YSDOT.....

ADDRESS

SAMPLING POINTWell # 2 Test Pump.....

BACTERIA PER ML30.....

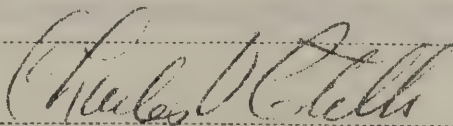
(AGAR PLATE COUNT AT 35°)

COLIFORM GROUPNegative.....

MPN NO/100 MLless than 2.2 OK.....

THE RESULTS INDICATE THAT THE WATER WAS
OF A SATISFACTORY SANITARY QUALITY WHEN THE SAMPLE WAS
COLLECTED.

REMARKS:


Charles V. Costello

30 ALLENDALE ROAD
BINGHAMTON, N. Y. 13903
722 - 0030

COSTELLO'S LABORATORY INC.

SUCCESSOR TO NELSON & LAUDER
CHARLES V. COSTELLO
CONSULTING SANITARY CHEMIST

LABORATORY FOR
SANITARY & ANALYTICAL
CHEMISTRY

RESULTS OF EXAMINATION OF WATER

LABORATORY NO. C 61/73 COLLECTED BY Ray Randolph
DATE COLLECTED 6/7/73 RECEIVED 6/7/73 REPORTED 6/12/73
PLACE Contract Fastel'd 73-1 COUNTY Chemung
(CITY, TOWN, VILLAGE OR HAMLET)
SAMPLING POINT Well # 2
OWNER NYS DOT TENANT _____

BACTERIAL EXAMINATION

TEST FOR COLIFORM GROUP

BACTERIA PER ML. AGAR, 35°C - 24 HRS. _____ M. P. N. * / 100 ML _____

THIS WATER WAS _____ OF A SATISFACTORY SANITARY QUALITY WHEN THE SAMPLE WAS COLLECTED

PHYSICAL EXAMINATION

COLOR 2 TURBIDITY 2 ODOR + COLD Veg. + HOT _____

CHEMICAL EXAMINATION

RESULTS IN PARTS PER MILLION

IRON (Fe) <u>.06</u>		AMMONIA FREE (AS N) _____		OXYGEN CONSUMED (O) _____	
MANGANESE (MN) <u>neg.</u>		NITROGEN CONSTITUENTS	ALB. AMMONIA (AS N) _____	CHLORIDES (Cl) <u>22</u>	
<u>as Rec'd</u>			NITRITES (AS N) _____	TOTAL HARDNESS (AS CaCO ₃) <u>155</u>	
CARBON DIOXIDE (CO ₂) <u>6</u>			NITRATES (AS N) <u>1.5</u>	ALKALINITY (AS CaCO ₃) <u>97</u>	
CHLORIDES (F) _____			LOSS OF IGNITION _____	CALCIUM (AS CaCO ₃) <u>130</u>	
TOTAL SOLIDS <u>231</u>			SULFATES <u>35</u>	MAGNESIUM (AS CaCO ₃) <u>25</u>	
BICARBONATES <u>116</u>			COPPER _____	ELECTROMETRIC PH VALUE <u>7.4</u>	
SILICA _____			ORTHO PHOSPHATES _____	META PHOSPHATES _____	
TOTAL PHOSPHATES _____			TEMP AIR ° F _____	TEMP WATER ° F _____	
SUSPENDED MATTER _____					
DETERGENTS _____					

REMARKS:

* MOST PROBABLE NUMBER

+1=VERY SLIGHT, 2=SLIGHT, 3=DISTINCT, 4=DECIDED, 5=EXTREME

Charles V. Costello

CHARLES V. COSTELLO

INDEX OF SAND ANALYSIS

Randolph Well & Pump Co.

5/17/73

Well No. 2 for State of N.Y.

SAND ANALYSIS

UOP JOHNSON DIVISION

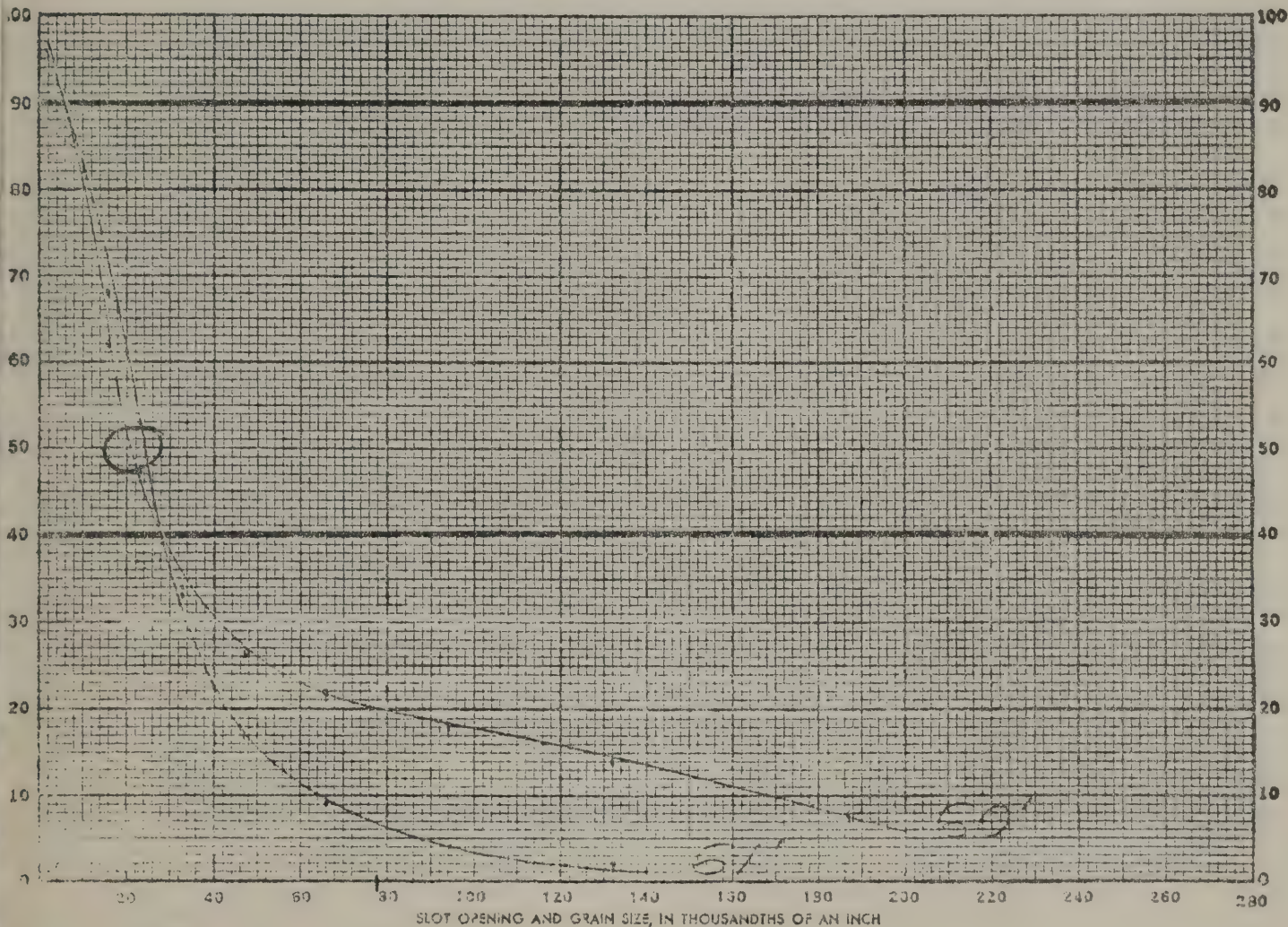
315 North Pierce Street
Saint Paul, Minn. 55104

Sample sent in by Randolph Well & Pump Co., Inc.

Town Cortland State N.Y. Date 5/17/73

From well of Well No. 2 for State of New York at Louman Route 17

Remarks Contract No. Fasteld 73-1 57702 (Rest Area)



U.S.

SIEVE OPENINGS	CUMULATIVE PER CENT RETAINED	
	60'	61'
.250		
.187		
.150	14	2
.125	18	4
.106	22	9
.085	26	17
.075	34	33
.063	47	53
.053	52	62
.045	56	65
SCREEN		
SLOT .006-91		90

Notes:

Recommended Slot Opening:

Recommended Screen: Dia. _____ in. Length _____ Ft.

By:

SO MANY CONSIDERATIONS ENTER INTO THE MAKING OF A GOOD WELL THAT, WHILE WE BELIEVE SLOT SIZES FURNISHED OR RECOMMENDED FROM SAND SAMPLES ARE CORRECT WE ASSUME NO RESPONSIBILITY FOR THE SUCCESSFUL OPERATION OF JOHNSON WELL SCREENS

SAND ANALYSIS

UOP JOHNSON DIVISION

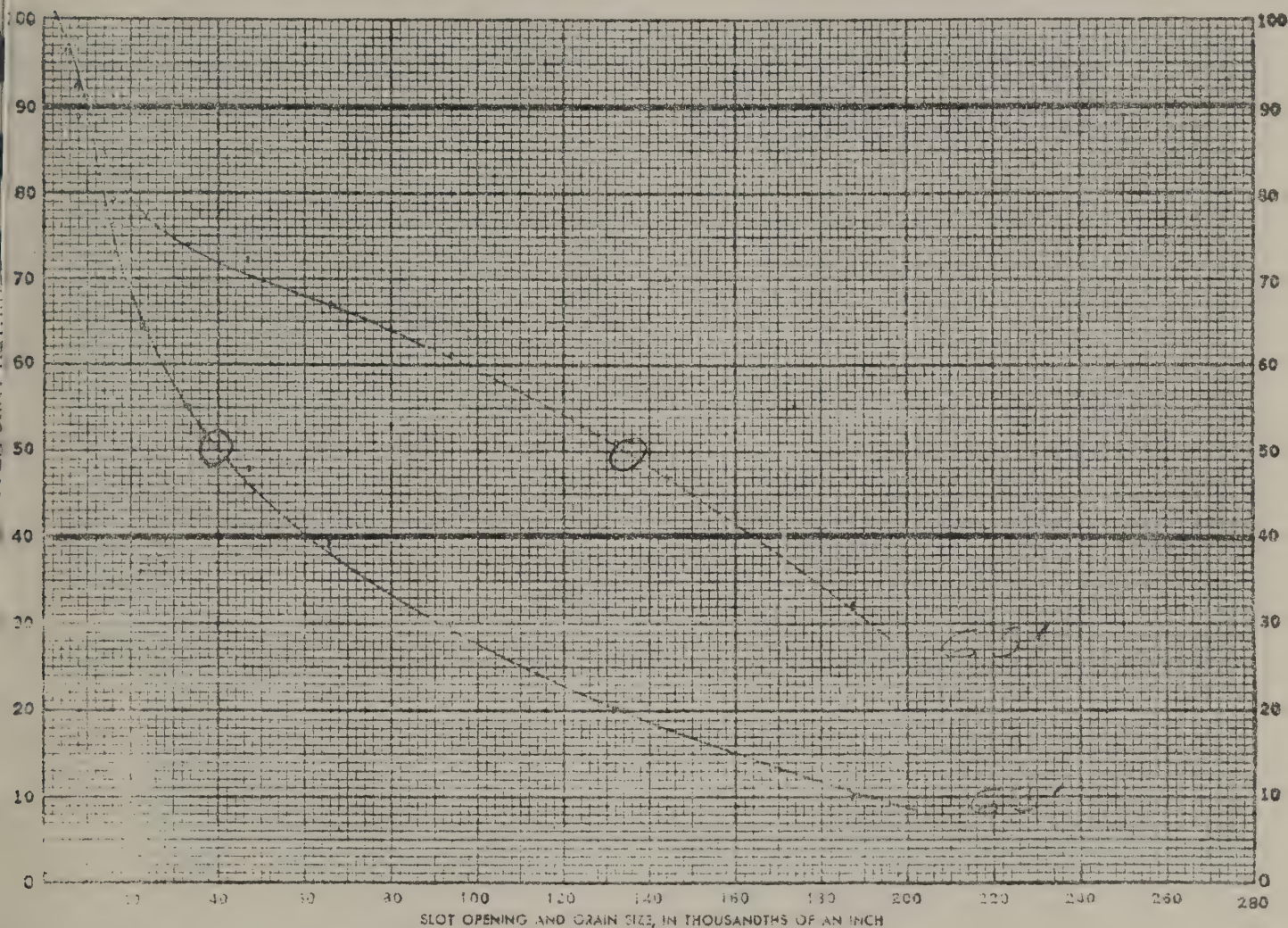
315 North Pierce Street
Saint Paul, Minn. 55104

Sample sent in by Randolph Well & Pump Co., Inc.

Town Cortland State N.Y. Date 5/17/73

From well of Well No. 2 for State of New York at Lowman Route 17

Remarks Contract No. Fastel 73-1 57702 (Rest Area)



VS

SIEVE OPENINGS	CUMULATIVE PER CENT RETAINED	
	63'	65'
.250		
.167	10	32
.132	20	51
.094	30	67
.066	45	72
.047	72	76
.033	77	77
.025	77	77
.018	77	77
.015	77	77
SCREEN SLOT .005-.96	23	

Notes: _____

Recommended Slot Opening: _____

Recommended Screen: Dia. _____ in. Length _____ Ft.

By: _____

SO MANY CONSIDERATIONS ENTER INTO THE MAKING OF A GOOD WELL THAT, WHILE WE BELIEVE SLOT SIZES FURNISHED OR RECOMMENDED FROM SAND SAMPLES ARE CORRECT WE ASSUME NO RESPONSIBILITY FOR THE SUCCESSFUL OPERATION OF JOHNSON WELL SCREENS

SAND ANALYSIS

UOP JOHNSON DIVISION

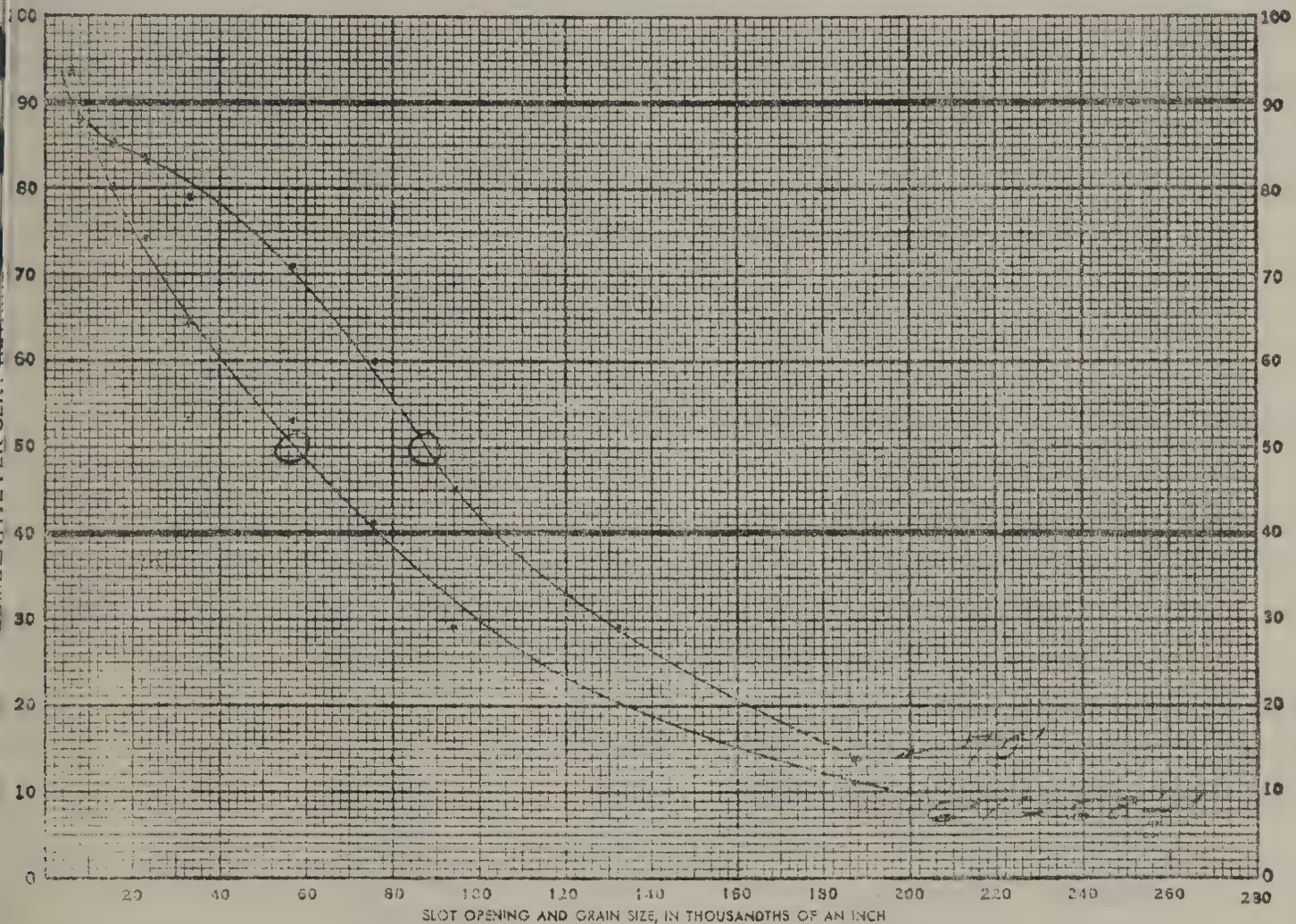
315 North Pierce Street
Saint Paul, Minn. 55104

Sample sent in by Randolph Well & Pump Co., Inc.

Town Cortland State N.Y. Date 5/17/73

From well of Well No. 2 for State of New York at Layman Route 17

Remarks Contract No. Fasteld 73-1 57702 (Rest Area)



US.

8
12

SIEVE OPENINGS	CUMULATIVE PER CENT RETAINED	
250	57-68	70
187	11	12
132	2	2
104	29	43
80	41	60
60	53	71
40	74	90
30	80	93
20	89	93
10	93	93
SCREEN SLOT	0.005-93	

Notes:

Recommended Slot Opening:

Recommended Screen: Dia. in. Length Ft.

By:

SO MANY CONSIDERATIONS ENTER INTO THE MAKING OF A GOOD WELL THAT, WHILE WE BELIEVE SLOT SIZES FURNISHED OR RECOMMENDED FROM SAND SAMPLES ARE CORRECT WE ASSUME NO RESPONSIBILITY FOR THE SUCCESSFUL OPERATION OF JOHNSON WELL SCREENS

RANDOLPH WELL & PUMP CO., INC.
Cortland, N. Y.

DRILLER'S LOG

Invoice No. WELL #2

Owner's Name DEPT of TRANSPORTATION Address LOWMAN N.Y. - RTE 17

Contract No. FASTELD 73-1 Size of Well 6" Mach. No. 10 Driller HAYNE

GRAVEL-SAND G.P.M. SEE TEST SHEET Draw Down Total Depth in Feet 72

Started MAY 10 - 1973 Date Completed

DEPTH FEET	ROCK DRILLED	GASOLINE IN GALS.	FORMATION AND REMARKS
			0-5 ft. - Dry gravel
			5-10 - Dry gravel
			10-15 - Dry gravel
			15-20 - Dry gravel
			20-25 - Dry gravel
			25-30 - Boulder fine & medium gravel - some clay
			30-35 - sand, gravel & clay balls
			35-40 - sand, fine & coarse gravel, hard pan
			40-45 - sand, gravel, hard pan
			45-50 - sand, gravel, hard pan
			50-54 - sand, gravel, hard pan
			55-60 - Water, sand & gravel - Static Level - 48'
			61' - Water, Static level - 41', sand & gravel
			63' - water, Static level - 42', sand & gravel
			65' - sand & coarse gravel - water
			67-68 - sand & coarse gravel - water
			70-72 - sand very silty

MARKS:

Sheet 1 of 2

Step DRAW Down Test

Measurements taken top of casing 6" above CH. RECORD OF TEST

Date 5-31-73

For Rent of Transportation - State of New York

Well Located At

B-13 FOR: RANDOLPH WELL & PUMP CO.

Contract # FASTLD-73-1

Step Draw Down Test

Measurements taken top of casing 9" above C.L.

RECORD OF TEST

Well No. 2

Date 6-5-73

For Dept. of Transportation - State of New York

Well Located at Lorman N. Y.

TIME	PUMPING LEVEL FEET	METER READING	STATIC LEVEL	G. P. M.
1:00			42' 8"	25
1:15	44' 2"			25
1:30	44' 2"			25
1:00	44' 2"	increased		37 1/2
1:15	44' 10 1/2"			37 1/2"
1:30	44' 11"			37 1/2"
1:45	44' 11"			37 1/2"
2:00	45' 11 1/2"	increased		48 1/2"
2:15	45' 11 1/2"			48 1/2"
2:30	45' 11 1/2"			48 1/2"
2:45				48 1/2"
3:00		increased ()		65
3:15				65
3:30				65
3:45				65
4:00				65
4:15				65
4:30				65
4:45				65
5:00				65
end of 8 hr Step draw down test				

Make & size of engine or motor used: 3- H.P. Goulds Submersible #41M30412
 Remarks: all measurements taken 9" above C.L.

DESCRIPTION OF PUMP USED			SIZE OF PULLEY	
TYPE	Sub. Pump		INCH ORIFICE ON	
SIZE	8"		WIDTH OF WEIR	
HEAD	6"		DEPTH AIR LINE	
HP NO.	3		AIR PRES. WHEN NOT PUMPING	
CHARGE	2"		STATIC LEVEL	
TIME OF SETTING	59'		Height of	
PIPE	FT.		gauge above	
	INCH PIPE		base	

WITNESS FOR PURCHASER

Ray Randolph
 B-14 FOR: RANDOLPH WELL & PUMP CO.

CONTRACT # WASTED 73-1 R. D. 4, CORTLAND, N. Y.

Sheet 1 of 2

16 hr. pump test
Measurements taken top of casing 9' above bottom OF TEST

Well No. 2

Date 6-6-23

For Dept. of Transportation - State of New York

Well Located At Lewiston

TIME	PUMPING LEVEL FEET	METER READING	STATIC LEVEL	G. P. M.
12:00 A.M.			42' 9"	
1:00				65
1:15	47' 1"			65
1:30	47' 1"			65
1:45	47' 1"			65
2:00	47' 1"			65
2:15	47' 1"			65
2:30	47' 1"			65
2:45	47' 1"			65
3:00	47' 1"			65
3:15	47' 1"			65
3:30	47' 1"			65
3:45	47' 1"			65
4:00	47' 1"			65
4:15	47' 1"			65
4:30	47' 1"			65
4:45	47' 1"			65
5:00	47' 1"			65
5:15	47' 1"			65
5:30	47' 1"			65
5:45	47' 1"			65
6:00	47' 1"			65
6:15	47' 1"			65
6:30	47' 1"			65
6:45	47' 1"			65
7:00	47' 1"			65

Make & size of engine or motor used: 3- H.P. Goulds Submersible #41M30412
Remarks: all measurements taken w/ Electric probe

DESCRIPTION OF PUMP USED
Type Sub F. m.p.
AGES 8
SIZE 6"
PUMP NO. 3
DISCHARGE 2"
DEPTH OF SETTING 59'
LOCATION FT. INCH PIPE

SIZE OF PULLEY
INCH ORIFICE ON
WIDTH OF WEIR
DEPTH AIR LINE
AIR PRES. WHEN NOT PUMPING
STATIC LEVEL 42' 9"
Height of
gauge above
base

Well No. 2

For Dept. of Transportation - State of New York

Well Located At Laramie, N.Y.

Date 6-6-73

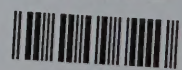
TIME	PUMPING LEVEL FEET	METER READING	STATIC LEVEL	G. P. M.
0:00	47' 1"			65
0:00	47' 1"			65
0:00	47' 1"			65
0:30	47' 1"			65
		RECOVERY		
0:30	47' 1" - PL.			
0:31	42' 11"			
0:32	42' 11"			
0:33	42' 11"			
0:34	42' 10 3/4"			
0:35	42' 10 3/4"			
0:40	42' 10 3/4"			
0:45	42' 10 1/2"			
0:50	42' 10 1/2"			
0:55	42' 10 1/4"			
1:00	42' 10 1/4"			
-73 (7:30)	42' 10"			

Make & size of engine or motor used:

Remarks:

DESCRIPTION OF PUMP USED	SIZE OF PULLEY
INCHES	INCH ORIFICE ON
WIDTH OF WEIR	DEPTH AIR LINE
AIR PRES. WHEN NOT PUMPING	STATIC LEVEL
Height of	gauge above base
INCH PIPE	

00973



LRI